Listing of Claims:

1. (previously presented) A process for the preparation of a coating, adhesive, film or sheet wherein a mixture of a polyisocyanate functional, a polyepoxide functional, a polyanhydride functional or a polyketone functional compound or polymer and a dispersion of a compound containing reactive hydrogen, which compound is a polyhydrazide, a polysemicarbazide, or a polysulphonylhydrazide, in a material which contains no groups which are reactive toward the compound containing reactive hydrogen, in which mixture the reactivities of the isocyanate, epoxide, anhydride or the ketone functions towards the hydrazide, semicarbazide, or sulphonylhydrazide is absent or low at ambient conditions and the reactivities are high at temperatures of 50 to 300° C, is applied onto a substrate at ambient temperature, followed by reacting the above compounds at 50 to 300° C for 1 to 10 min, or is applied onto a substrate at ambient temperature, followed by immersing the coated substrate into water of 20 to 100° C for 1 to 10 min, so that the mixture cures completely.

2. (previously presented) The process according to claim 1, wherein at ambient temperature said compound containing reactive hydrogen is a solid material, a powder, a granule, a flake or grind or a mixture thereof.

3. (previously presented) The process according to claim 2 wherein size of the grind of said compound containing reactive hydrogen is from 0.5 to 200 μm.

4. (previously presented) The process according to claim 1, wherein said polyhydrazide is selected from the group consisting of oxalic dihydrazide, malonic dinydrazide, succinic dinydrazide, adipic dihydrazide, sebacic dihydrazide, dodecanoic dihydrazide, isophthalic dihydrazide, piperazine N,N'-dihydrazide, m-benzene-dihydrazide, and p-benzene-dihydrazide.

5. (currently amended) The process according to claim [[4]] 1, wherein said polyhydrazide comprises adipic dihydrazide.

6. (currently amended) The process according to claim 1, wherein said polysemicarbazide is selected from the group consisting of ethane-disemicarbazide, butane-disemicarbazide, propane-disemicarbazide, hexane-disemicarbazide, para-benzene-disemicarbazide, ~~tuluene-2,4-disemicarbazide, tuluene-2,4-disemicarbazide~~ toluene-2,4-disemicarbazide, toluene-2,4-disemicarbazide, bis (4-semicarbazido-phenyl)ether, ~~bis-(4,4'-hydrozide)-3,3'-dimethoxy biphenyl~~ bis (4,4'-hydrazide)-3,3'-dimethoxy biphenyl, di-N,N'-methylamino urea, 4,4'-methylene-bis (cyclohexene semicarbazide), 3-semicarbazide-methyl-3,5,5-trimethylcyclohexyl-semicarbazide and mixtures thereof.

7. (previously presented) The process according to claim 4, wherein said polysulphonyl hydrazide is selected from the group consisting of p,p'-oxybis benzene sulphonyl hydrazide, bis(methylhydrazido)sulphate, bis (methylhydrazidosulphonyl)piperazine, and bis p-(hydrazidosulphonylamino)benzene.

8. (cancelled)

9. (previously presented) The process according to claim 1, wherein the material which contains no groups which are reactive towards the compound containing reactive hydrogen, is a polyether, a polyester, a polycarbonate, a polyacrylate, a polyvinylalkylether, a polyurethane, a polyacrylate, a polyvinylalkylether, or a polyurethane.

10. (previously presented) The process according to claim 1, wherein said mixture of the polyisocyanate functional, the polyepoxy functional, or the polyketone functional compound or polymer and the compound containing reactive hydrogen, is solvent free.

11. (previously presented) The process according to claim 1, wherein said polyisocyanate functional compound or polymer and said compound containing reactive hydrogen are mixed together in an equivalent ratio of 0.5 to 1.5, applied onto a substrate and the so obtained covered or impregnated substrate is heated to a temperature of 50 to 300° C for 1 to 10 min.

12. (previously presented) The process according to claim 1, wherein said polyisocyanate functional compound or polymer and said compound containing reactive hydrogen are mixed together in an equivalent ratio of 0.5 to 1.5, and applied onto a substrate whereafter the covered or impregnated substrate is immersed into water of 20 to 100° C for 1 to 10 min.

13. (previously presented) Coatings, coated substrates, adhesives, films, sheets, impregnated substrates, synthetic leathers, in mold coatings, coated leathers, coated polyvinylchlorides, coated non-wovens, coated coagulated polyurethane substrates, and breathable coated substrates, obtained by applying the process of claim 1.

14. (previously presented) A coating mixture to be applied in the process of claim 1 wherein the coating mixture comprises a mixture of a polyisocyanate functional, a polyepoxyde functional, a polyanhydride functional or a polyketone functional compound and a dispersion of a compound containing reactive hydrogen, which compound is a polydydrazide, a polysemicarbazide, or a polysulphonylhydrazide, in a material which contains no groups which are reactive towards the compound containing reactive hydrogen, in which mixture the reactivities of the isocyanate, epoxide, anhydride or the ketone functions towards the hydrazide or semicarbazide sulphonylhydrazide is absent or low at ambient conditions and the reactivities are high at temperatures of 50 to 300° C or when the mixture is immersed into water.

15. (previously presented): A coating mixture according to claim 1, wherein the mixture of the polyisocyanate functional compound, the polyepoxide functional compound, the polyanhydride functional compound or the polyketone functional compound or polymers thereof and the compound containing reactive hydrogen is stable at ambient temperature for at least one day.

16. (previously presented): A coating mixture according to claim 14, wherein the mixture of the polyepoxide functional compound, the polyanhydride functional compound or the polyketone functional compound or polymers thereof and the compound containing reactive hydrogen is stable at ambient

temperature as a one pot system.

17. (previously presented) A coating mixture according to claim 14, wherein the compound containing reactive hydrogen is present as grind which is dispersed in a material which is non-reactive towards the material containing reactive hydrogen.

18. (previously presented) A coating mixture according to claim 14, wherein at ambient temperature the compound containing reactive hydrogen is a solid, which is a powder, a granule, a flake or a grind or a mixture thereof.

19. (previously presented) A coating mixture according to claim 18, wherein particle size of the grind or of the dispersion of the compound containing reactive hydrogen is from 0.5 to 200 μm.